

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Application of:
Loretta Ann Grezzo Page
Kathryn Amy Pearlstine
Waifong L. Anton



SERIAL NO.: 09/120,608

CASE NO.: IJ-0005

FILED: JULY 22, 1998

GROUP ART UNIT: 1714

FOR: Water Insoluble Non-Ionic Graft Copolymers

EXAMINER: C. SHOSHO

DECLARATION UNDER 37 CFR §1.132

Assistant Commissioner for Patents
Washington, DC 20231

Sir:

J. Joseph A. Tessari, on my oath, do hereby say:

1. I am employed by E. I. du Pont de Nemours & Co. ("DuPont") in Wilmington, Delaware as Senior Counsel. I am an attorney at law and licensed to practice before the United States Patent and Trademark Office ("USPTO").
2. I am the attorney of record for the above captioned application. I submit this Declaration to present evidence, in accordance with a request by the Examiner, that the present invention and the invention claimed in copending US Patent Application No. 09/120,922 filed July 22, 1998 (the "922 Application") were under common ownership of DuPont or under an obligation to assign the invention to DuPont in accordance with 35 USC §103(c).
3. I am personally acquainted with each of the inventors of the above captioned application and have personal knowledge that each such inventor is currently, or was at the time of the present invention, employed by DuPont.
4. As a matter of company policy and as a condition of employment with DuPont, all employees of DuPont are required to sign an agreement which provides, in part, that all inventions made or conceived by the employee while employed by DuPont shall be assigned to DuPont. Thus, at the time of the present invention, each of the inventors (Kathryn Pearlstine, Loretta Page and Waifong Anton) was under an obligation to assign such invention to DuPont.

5. I am also personally acquainted with each of the named inventors of the 992 Application and have personal knowledge that each such inventor is currently or was, at the time of the present invention employed by DuPont. As such, each inventor of the 992 Application was under the same obligation to assign the invention of the 992 application to DuPont as set forth above.
6. Based on the facts as stated above, the present invention and the invention of the 992 Application were under an obligation to assign the invention to DuPont. Accordingly, the conditions stated in 35 USC §103(c) are satisfied.
7. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Respectfully submitted,



Joseph A. Tessari
Attorney for Applicants
Registration No. 32,177
Telephone: 302-992-3407

Dated: 18 Jan 00
Wilmington, DE

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4/3/00
H8

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Washington, DC 20231

Sir:

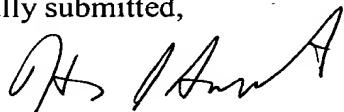
Harry J. Spinelli, on my oath, do hereby say:

1. I am employed by E. I. du Pont de Nemours & Co. ("DuPont") in Wilmington, Delaware as a Research Fellow. I have been employed by DuPont as a polymer chemist for over 25 years.
2. I am familiar with the technology disclosed and claimed in the above-captioned application and with the arguments presented in the accompanying response to the Office Action mailed of October 18, 1999 ("Paper No. 5"). I am also well versed in the polymer art, particularly as it relates to polymers used in coatings and in ink jet inks. I am an inventor or author of over 54 patents and publications in the polymers, coatings, paints and ink jet arts. I submit this Declaration to rebut the Office Position in Paper No. 5 to the effect it would be obvious to a skilled worker to utilize a polymer dispersant as a film-forming binder.
3. It is well recognized and understood by those skilled in the art that polymer dispersants and polymer binders are different from one another, both functionally and structurally. Dispersants serve the function of maintaining an insoluble particle (e.g., a pigment) in suspension. Thus, dispersants must have an affinity for both the particle being dispersed and the medium in which it is being dispersed. These competing affinities must be balanced to provide a dispersion that is stable in storage and suited for its intended application.

4. Polymer binders, on the other hand are required to have good film-forming properties and good substrate binding properties. With very rare exceptions, it is undesirable for a polymer binder to function in any respect as a dispersant because doing so tends to decrease, rather than improve, the stability of the dispersion.
5. Because of the different functions required of polymer dispersants and polymer binders, one skilled in art would not consider them interchangeable and, in particular, a skilled artisan would not consider it obvious to use a polymer dispersant as a polymer binder in a coating composition or in an ink jet ink composition. This is true even though a particular dispersant and a particular polymer binder may have contain the same or similar monomers.
6. The art of record in the above captioned application demonstrates the recognized distinction between dispersants and other polymers:
 - (a) Held 5,853,861 at column 4, line 47 to column 5, line 22 discusses dispersants separately from polymer additives and discloses separate different types of polymers from each.
 - (b) Ma, EP 0 851 014 discloses pigmented inks containing polymer dispersants and separately mentions hydrosol polymers as polymer additives (i.e., not having any dispersant function) and additionally mentions “[o]ther known additives, such as humectants, viscosity modifiers and other acrylic or non-acrylic polymers may be added to improve various properties of the ink compositions as desired.” Page 5, lines 54-55.
7. None of the references of record disclose or suggest that the polymeric dispersant be used as a binder in the ink. If, as the Office suggests, it would be obvious to use polymer dispersants as binders, why is it that none of the references even hint at doing so? Certainly it would be far simpler and less costly to use the same polymer as both the dispersant and the binder, rather than use separate polymers for each function. Thus, one would certainly expect that, if it were as obvious and well known as the Office seems to indicate, at least one of the references would mention it, suggest it or exemplify it. The fact that none of the references does so, indicates that the practice of using dispersants as binders is not as obvious as the Office seems to believe.
8. For the reasons stated, it is my professional conclusion that one skilled in the art would not consider it obvious to utilize a polymeric pigment dispersant in an ink jet ink to fill the function of a film-forming binder.

9. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Respectfully submitted,



Harry J. Spinelli

Dated: 18 January 2000
Wilmington, DE